

Groundwater – the Hidden Resource

Drink it, protect it, conserve it



Groundwater & the Hydrologic Cycle

Atmosphere & Area of Runoff

Water changes forms—from liquid to gas—as it moves through the above ground phase of the hydrologic cycle.

Area of Infiltration

Water begins to infiltrate loose soil on its way to recharge aquifers.

This area is the most influenced by human activities. Small pockets of less permeable soil halt infiltration, creating small perched aquifers.

Water Table & Shallow Aquifers

Groundwater saturates sand and gravel, defining this area as an unconfined aquifer, filling it up to the water table. Groundwater now begins to flow horizontally toward rivers and lakes. Wells withdraw water from this saturated soil, drawing down the water table in a "cone of depression."

Confining Layers

Layers of clay and silt slow groundwater movement due to their low permeability. These confining layers separate different aquifers and provide very little water for well withdrawal.

Confined Aquifer (Deep Aquifer)

Deeper, older layers of sand and gravel, covered by a confining layer of soil, are filled with groundwater and considered confined aquifers. These aquifers sometimes contain artesian wells where pressure may cause water to flow to the surface naturally.

Bedrock

Lying deep beneath the earth's surface, bedrock is a layer of hardened material that usually yields less water than sand and gravel.

For more information:

<http://dnr.metrokc.gov/groundwater>



King County

Department of Natural Resources and Parks

Water and Land Resources Division

Produced by: King County Department of Natural Resources and Parks, WLR Visual Communications & Web Unit
File name: 041 ZGWPostcard.indd ev